

cooling the projections to harden them in position in the separator.

REMARKS

Claims 9, 13, 14 and 17 are pending. By this Amendment, the drawings are corrected pursuant to a Request for Approval of Drawing Corrections, the Abstract and specification are replaced, claims 1-8, 10-12, 15 and 16 are cancelled, the Title and claims 9, 13, 14 and 17 are amended. No new matter is added by any of these amendments.

Applicants gratefully acknowledge that the Office Action indicates that claims 13, 14 and 17 contain allowable subject matter.

Reconsideration based on the following remarks is respectfully requested.

The attached Appendix includes a marked-up copy of the substitute specification (37 CFR §1.125(b)(2)), and each rewritten claim (37 CFR §1.121(c)(1)(ii)).

I. The Drawings Satisfy All Formal Requirements

The Office Action objects to the drawings based on informalities. Figures 1 and 5 are corrected pursuant to the attached Request for Approval of Drawing Corrections to obviate this objection. Withdrawal of the objection to the drawings is respectfully requested.

II. The Specification Satisfies All Formal Requirements

The Office Action objects to the specification based on informalities. The specification has been replaced to obviate the objection. Withdrawal of the objection to the specification is respectfully requested.

III. The Abstract Satisfies All Formal Requirements

The Office Action objects to the Abstract based on informalities. The Abstract has been amended to obviate the objection. Withdrawal of the objection to the Abstract is respectfully requested.

IV. The Title Satisfies All Formal Requirements

The Office Action objects to the Title as not descriptive. The Title has been amended to obviate the objection. Withdrawal of the objection to the Title is respectfully requested.

V. Pending Claims 13, 14 and 17 Define Allowable Subject Matter

The Office Action objects to claims 13, 14 and 17 as being in dependent form. The Office Action indicates that claims 13, 14 and 17 would be allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims.

In the Amendment, claims 13, 14 and 17 have been rewritten to place this application in condition for allowance. Withdrawal of the objection is respectfully requested.

VI. Pending Claim 9 Defines Patentable Subject Matter

The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) over JP 05-074469 A (to Masaru); claims 1-7 under 35 U.S.C. §102(e) over Kindler (U.S. Patent 6,228,518); claims 1-7 and 10 under 35 U.S.C. §102(b) over Tajima *et al.* (U.S. Patent 4,225,654); and further rejects claims 7 and 10 under 35 U.S.C. §103(a) over JP 05-074469 A in view of Kindler; claims 11 and 12 under 35 U.S.C. §103(a) over JP 05-074469 in view of JP 61-253768 A; claim 9 under 35 U.S.C. §103(a) over JP 05-074469 in view of Kindler and further in view of JP 61-253768 and Maget (U.S. Patent 4,648,955); claims 11 and 12 under 35 U.S.C. §103(a) over Tajima in view of JP 61-253768; claims 15 and 16 under 35 U.S.C. §103(a) over Tajima in view of JP 61-253768, Kindler and Ida *et al.* (U.S. Patent 5,639,403). The rejection for claim 9 is respectfully traversed.

JP 05-074469 does not teach or suggest a fuel cell including at least a cell function assembly including an electrolytic membrane, a pair of electrode plates assembled in contact with opposite surface of the electrolytic membrane, a first separator placed in contact with one of the electrode plates to form a reaction chamber to be supplied with fuel gas, a second separator placed in contact with the other electrode plate to form a reaction chamber to be supplied with oxidizing agent gas; and a set of current-collecting plates assembled respectively in contact with the first and second separators at opposite outermost sides of the cell, wherein the electrode plates each are divided into a plurality of spaced plates, and wherein the current-collecting plates each are divided into a plurality of spaced plates.

Instead, JP 05-074469 discloses a non-permeable plate-shaped molding and interspersed carbon rods. JP 05-074469 further discloses a plurality of recessed portions of fixed depth being provided in both upper and lower surfaces of the molding, with the rods passed through the respective recessed portions, and the recessed portions functioning as air passages. See Abstract of JP 05-074469.

Additionally, Kindler does not compensate for the deficiencies of JP 05-074469 in teaching or suggesting the features of claim 9. Rather, Kindler discloses a two-sided separator for inhibiting communication between fuel cell compartments. See column 2 lines 23-31 of Kindler.

Although JP 61-284064 discloses a current collecting plate 4 divided into four spaced plates 41-44, the current collecting plate 4 is divided only to absorb thermal expansion for reducing distortion of the plate and for restraining deterioration of the efficiency of current collection. Therefore, JP 61-284064 fails to disclose or suggest a plurality of spaced electrode plates in relation to the divided current collecting plates, as recited in claim 9.

Further, Maget discloses a planar multi-junction electrochemical fuel cell with a plurality of pairs of electrodes disposed on either side of and in contact with the simple electrolytic membrane. The electrodes in the first chamber are separated from one another by spaces, while the electrodes in the second chamber are separated from one another by spaces and electrically connected in series to the electrodes in the first chamber. Hence, Maget does not teach or suggest a plurality of divided current collection plates in relation to the electrodes spaced in the first and second chambers, as recited in claim 9.

For at least these reasons, Applicants respectfully assert that the independent claim 9 is now patentable over the cited references. Consequently, all the pending claims are in condition for allowance. Thus, Applicants respectfully request withdrawal of the 35 U.S.C. §103 rejection of claim 9.

VII. Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is requested to contact the Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,



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JAO:GWT/sdb

Attachments:

Appendix
Substitute Abstract
Substitute Specification
Request for Approval of Drawing Corrections

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